

REMARKS

A new, more descriptive title, "Surface Treating Apparatus", has been provided.

Applicants have rewritten claims 12 and 13 as new claim 21. Claim 16, which was withdrawn, has been cancelled, along with claims 12 and 13. The claims now being prosecuted are claims 21, 14 and 15.

Claim 21, as now presented, is to a surface treating apparatus that has a treating chamber connected to an evacuating system, and a melting / evaporating source for melting and evaporating a wire-shaped vapor-depositing material containing a vapor deposition controlling gas, disposed in the treating chamber. A rotatable member is provided, disposed in the treating chamber, and spaced above the melting/evaporating source, for retaining a work on which the vapor depositing material is deposited. A horizontally disposed feed reel of the wire-shaped vapor-depositing material containing the vapor deposition controlling gas is provided to supply the wire-shaped vapor-depositing material containing the vapor deposition controlling gas to the melting /evaporating source, and is disposed in the treating chamber below the melting/evaporating source. Such an arrangement is not taught or suggested in the prior art.

In the Office Action, claims 12-15 are rejected as either anticipated by Steube (U.S. 4,233,937) under 35 U.S.C. 102(b), or as obvious under 35 U.S.C. 103(a) in view of that reference alone, or that reference combined with Satoh (JP 60-92466).

The Office Action alleges that Steube shows a surface treating apparatus having a vacuum chamber that contains a heater for melting and evaporating a wire-shaped vapor-depositing material (See Fig. 1), which material can be aluminum. Steube shows a reel (134) of wire and means to supply the wire to the melting and evaporating heater. The Office Action notes that original Claim 12 is not limited to an apparatus only using a wire-shaped vapor-depositing material containing a vapor deposition controlling gas, and alleges that Steube could be inherently capable of using such a wire. The Office Action next cites Satoh to allege that aluminum wire, conventionally used as a source for vacuum evaporation coating, typically or inherently contains hydrogen, and that it would be obvious to use a hydrogen-containing aluminum wire in the Steube apparatus.

As now provided in claim 21, a horizontally disposed feed reel of wire-shaped vapor-depositing material containing a vapor deposition controlling gas is disposed in the treating chamber and the means for retaining a work is rotatable. The horizontally disposed feed reel, as mentioned at page 12, lines 4 to 9, of the present specification, prevents twisting or deflection of the wire being fed. The Steube reference does not teach or suggest such an arrangement and the advantages achieved. Also, the Steube reference is designed for coating large items with the items to be coated held stationary, with evaporator boats moving laterally, while the present claimed surface treating apparatus has a rotatable member for retaining a work that is to be treated.

The teachings of the Satoh reference also do not lead one to the present claimed apparatus and even combined with Steube does not teach or suggest the same.

In view of the present amendment to the claims and the above remarks, claims 21, 14 and 15 are believed to be patentable and early action towards allowance thereof is respectfully requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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